

What is claimed is:

1. A field emission display comprising:

a lower substrate;

lower electrodes arranged as stripes on the lower substrate;

5 a field emitter array including a plurality of emitters arranged at a predetermined interval on each of the lower electrodes;

an upper substrate which faces the lower substrate;

upper electrodes arranged as stripes on the upper substrate to intersect the lower electrodes; and

10 a phosphor array including a plurality of phosphors arranged on the upper electrodes, each phosphor pair of different colors being aligned with a respective one of the emitters,

wherein an upper electrode aligned with each emitter is comprised of first and second upper electrodes connected to a respective phosphor pair of different colors.

15 2. The field emission display of claim 1, wherein the emitters comprise:

a bus electrode layer arranged on a lower electrode such that a portion of the lower electrode is exposed;

electron emitter tips formed on the exposed portion of the lower electrode;

20 a gate dielectric layer formed on the bus electrode layer and having a well that surrounds the electron emitter tips; and

a gate electrode layer formed on the gate dielectric layer.

25 3. The field emission display of claim 2, wherein the electron emitter tips are metallic tips.

4. The field emission display of claim 2, wherein the electron emitter tips are formed of carbon nanotubes or a carbonaceous material.

30 5. The field emission display of claim 1, wherein the phosphor array includes a repeated pattern of a red phosphor, a green phosphor, and a blue phosphor.

6. The field emission display of claim 1, wherein two adjacent phosphors

of different colors which are aligned with different emitters are connected to the first and second upper electrodes, respectively.

7. The field emission display of claim 4, wherein two adjacent phosphors
5 of different colors which are aligned with different emitters are both connected to one of the first and second upper electrodes.

8. The field emission display of claim 1, wherein the lower electrodes are
cathodes, and the upper electrodes are anodes.

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